STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038628; AI 19195; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS:

Town of Sunset
Town of Sunset Wastewater Treatment Facility
855 Napoleon Avenue
Sunset, LA 70584

II. PREPARED BY: Afton J. Bessix

DATE PREPARED: October 21, 2008

III. PERMIT ACTION: reissue LPDES permit LA0038628, AI 19195; PER20080001

LPDES application received: July 30, 2008

EPA has not retained enforcement authority.
LPDES permit issued: September 1, 2003
LPDES permit expired: July 31, 2008

IV. FACILITY INFORMATION:

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Sunset.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located on LA Highway 178 in Sunset, St. Landry Parish.

D. The treatment facility consists of a one cell lagoon partitioned into two cells by baffles. The first cell has five floating aerators and second cell has lemna process with lemna floating barriers and grids. Disinfection is by ultraviolet light.

E. Outfall 001

Discharge Location: Latitude 30° 25' 29" North
Longitude 92° 4' 46" West

Description: treated sanitary wastewater

Design Capacity: 0.36 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed drainage ditch; thence into Bayou Bourbeaux; thence into the Vermilion River in segment 060801 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060801 of the Vermilion - Teche Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment 060801	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	Full

[1/]The designated uses and degree of support for Segment 060801 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060801 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Afton J. Bessix
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 060801, Vermilion River-Headwaters to Bayou Fusilier-Bourbeaux junction to New Flanders (Ambassador Caffery) Bridge, LA Hwy. 3073, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/ turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060801:

1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen
This TMDL was finalized January 19, 2001 and established a loading capacity equal to the 1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen. This TMDL estimated the necessary reduction in nonpoint source loadings accelerate progress toward full support of the DO standard. Since the TMDL did not require reductions in point source loadings, no additional permit requirements are included. However, individual point sources in the Vermilion Watershed should continue to be issued on the basis of flow rates as follows:

FLOW RATE	PERMIT LIMITS
greater than 25,000 gpd	May – Dec.: 10 mg/l $CBOD_5$/5 mg/l NH_3-N/5 mg/l DO Jan.- April: 20 mg/l $CBOD_5$/10 mg/l NH_3-N/5 mg/l DO
25,000 gpd or less	secondary limits year round

Additionally, in regard to nutrients such as nitrogen and phosphorous, LDEQ has determined that organic enrichment/DO directly correlates with overall nutrient impact. Thus, when organic enrichment/DO is limited (as with the established CBOD5/ NH3-N/ DO limits), LDEQ is also in effect limiting and controlling nutrient concentrations and impacts.

Therefore, this discharge will be permitted accordingly, and the permit maintains previously established limitations reflecting the above limits.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin
As per the TMDL finalized May 3, 2001, "Point sources do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges of organic suspended solids from point sources are already addressed by LDEQ through there permitting of point sources to maintain water quality standards for DO, the wasteload allocations for point source contributions were set to zero."

Therefore, TSS limits are being maintained as previously established in this permit according to the current state water quality standards.

Vermilion River TMDL for Fecal Coliform
The *Vermilion River TMDL for Fecal Coliform* was finalized on April 5, 2001, addressing the presence of pathogen indicators in the watershed. As per this TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will remain as previously established in this permit.

TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins
The *TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins* was finalized on March 21, 2002 and states that "the one point source discharger, FMC Corporation's Agricultural Products Group Plant (FMC)... is the only known point source in the Vermilion-Teche Basin." As a result, the TMDL establishes a WLA for FMC only. Since this TMDL does not consider the Town of Sunset to be a contributing source, no additional permit requirements are included.

Vermillion River TMDL for Sulfate
This TMDL was originally finalized on March 13, 2001 and established a specific WLA for the Town of Sunset. Due to a subsequent change in criterion, this TMDL was withdrawn on June 28, 2005. Therefore, no additional permit limitations are required

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$	30 60	10 mg/l 20 mg/l	15 mg/l 30 mg/l	Limits are set in accordance with the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Oxygen.*
TSS	45 60	15 mg/l 20 mg/l	23 mg/l 30 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	15 30	5 mg/l 10 mg/l	10 mg/l 20 mg/l	Limits are set in accordance with the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Oxygen.*
Dissolved Oxygen	N/A	5 mg/l	N/A	Limits are set in accordance with the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Oxygen.*

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD_5 and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0038628: Issued: September 1, 2003
Expired: July 31, 2008

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$				
May – December	10 mg/l	15 mg/l	2/month	Grab
January – April	20 mg/l	30 mg/l	2/month	Grab
TSS				
May – December	15 mg/l	23 mg/l	2/month	Grab
January – April	20 mg/l	30 mg/l	2/month	Grab
Ammonia-Nitrogen				
May - December	5 mg/l	10 mg/l	2/month	Grab
January – April	10 mg/l	20 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH (Standard Units)	---	---	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates that an inspection was performed on September 19, 2007 for this facility.

Inspector: LDEQ
Findings and/or Violations:

1. Facility did not meet permitted effluent limitations for fecal coliform during January, February, March, April, May and June of 2007.

2. Facility did not meet permitted effluent limitations for TSS during June of 2007.
3. Facility flow records indicate that design flow capacity of 0.36 million gallons per day is exceeded on a regular basis.
4. Hydraulic overloads occur at the facility after rain events. Usually results in the effluent over flowing at the UV light raceway.

B) Compliance and/or Administrative Orders

A review of the files indicates that no recent enforcement actions have been administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning May 1, 2006 through June 30, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Ammonia	001	May 2006	15 lbs/day	19.8 lbs/day
Ammonia	001	June 2006	15 lbs/day	17.4 lbs/day
Fecal Coliform	001	August 2006	400/100 ml	>1,000 ml
Fecal Coliform	001	September 2006	400/100 ml	>1,000 ml
TSS	001	October 2006	45 lbs/day 23 mg/l	57 lbs/day 30 mg/l
Ammonia	001	October 2006	15 lbs/day	21.2 lbs/day
Fecal Coliform	001	October 2006	400/100 ml	>1,000 ml
TSS	001	December 2006	45 lbs/day 15 mg/l 23 mg/l	52 lbs/day 16 mg/l 28 mg/l
Fecal Coliform	001	January 2007	200/100 ml 400/100 ml	>1,000 ml >1,000 ml
Fecal Coliform	001	February 2007	200/100 ml 400/100 ml	283 ml >1,000 ml
Fecal Coliform	001	March 2007	200/100 ml 400/100 ml	557 ml 1,000 ml
Fecal Coliform	001	April 2007	200/100 ml 400/100 ml	>1,000 ml >1,000 ml
Fecal Coliform	001	May 2007	200/100 ml 400/100 ml	510 ml >1,000 ml
Ammonia	001	May 2007	5 mg/l	5.7
$CBOD_5$	001	June 2007	30 mg/l	46 mg/l
TSS	001	June 2007	45 lbs/day 23 mg/l	91 lbs/day 32 mg/l
Ammonia	001	June 2007	15 lbs/day	30.6 lbs/day
Fecal Coliform	001	June 2007	400/100 ml	>1,000 ml
Fecal Coliform	001	July 2007	200/100 ml 400/100 ml	424 ml >1,000 ml
TSS	001	August 2007	23 mg/l	24 mg/l
Fecal Coliform	001	August 2007	200/100 ml 400/100 ml	424 ml >1,000 ml
Fecal Coliform	001	September 2007	200/100 ml 400/100 ml	>1,000 ml >1,000 ml
TSS	001	October 2007	23 ml	27 ml
Fecal Coliform	001	October 2007	400/100 ml	420 ml

Fecal Coliform	001	December 2007	400/100 ml	>1,000 ml
TSS	001	January 2008	60 lbs/day	68 lbs/day
Ammonia	001	January 2008	30 lbs/day	40.9 lbs/day
Fecal Coliform	001	January 2008	200/100 ml 400/100 ml	>1,000 ml >1,000 ml
Fecal Coliform	001	March 2008	200/100 ml 400/100 ml	394 ml >1,000 ml
Fecal Coliform	001	May 2008	400/100 ml	1,000 ml
$CBOD_5$	001	June 2008	30 lbs/day 10 mg/l 15 mg/l	40 lbs/day 13 mg/l 23 mg/l

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.36 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 0.36 MGD x 10 mg/l = 30 lbs/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
$CBOD_5$	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a reissue permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality

Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Sunset, Town of Sunset Wastewater Treatment Facility, July 30, 2008.